

6560 manual slide shown,
also available as CNC-ready



PRODUCT DESCRIPTION

- 6560—2-axis manual machine slide, inch
- 6561—2-axis manual machine slide, metric
- 6565—2-axis CNC-ready machine slide, inch
- 6566—2-axis CNC-ready machine slide, metric

Two-Axis Machine Slide

P/N 6560 (6561) Manual, 6565 (6566) CNC-Ready

Mounting the Base to Your Fixture

The base is mounted to your fixture by means of two 1/4-20 holes in the bottom of the base. As an alternative, a groove is provided around the base that can be used with Sherline's angle clamps. Drill and tap 10-32 holes in your fixture in the appropriate locations and use 10-32 socket head cap screws to hold the angle clamps. Angle clamps are P/N 35580 and can be ordered from Sherline.

Manual and CNC Versions

The manual version (P/N 6560) utilizes a handwheel that is graduated in .001" increments. There are 50 divisions on the handwheel, so one turn of the handwheel advances the table .050". The metric handwheel is graduated in .01 mm increments. There are 100 marked divisions, so one turn of the handwheel advances the table 1 mm.

The CNC version is ready to accept a 23 frame size stepper motor. Four mounting screws are provided for each motor mount. Also included is a handwheel (P/N 40080 or 41040) that can be mounted to the rear shaft of a dual-shaft stepper motor. This handwheel is graduated in .001" (or .01 mm) increments, with one revolution resulting in .050" (or 1 mm) of movement. The front shaft of the stepper motor is secured to the coupling by means of a set screw. The set screw is tightened by aligning it with the hole in the stepper motor mount and inserting a hex key to tighten it against the motor shaft.

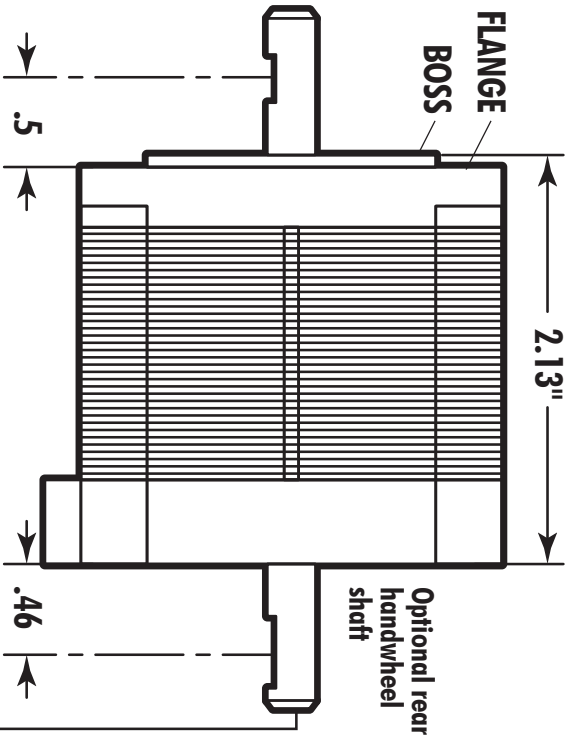
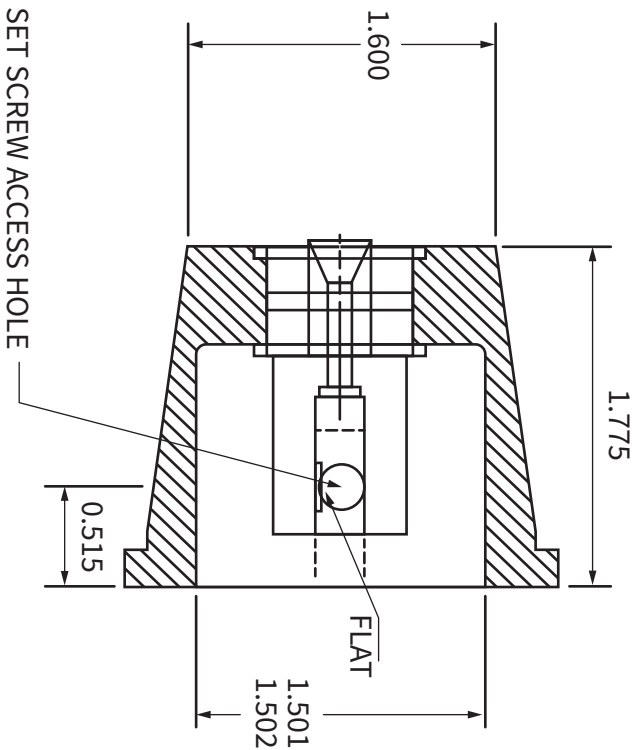
Putting a Flat on the Stepper Motor Shaft

Stepper motors ordered from Sherline come with a flat on each shaft where the coupling set screw is to be tightened. If you use a stepper motor from another source it is important that you machine or file a flat in the appropriate location before installation. If the set screw is not tightened against a flat, it can upset the surface of the shaft, making it impossible to remove from the coupling. The drawing of the mount on page 2 shows the location for the flat on the motor shaft. The center of the flat will occur .515" (13.1 mm) from the mounting surface of the stepper motor.

Thank you,
Sherline Products Inc.

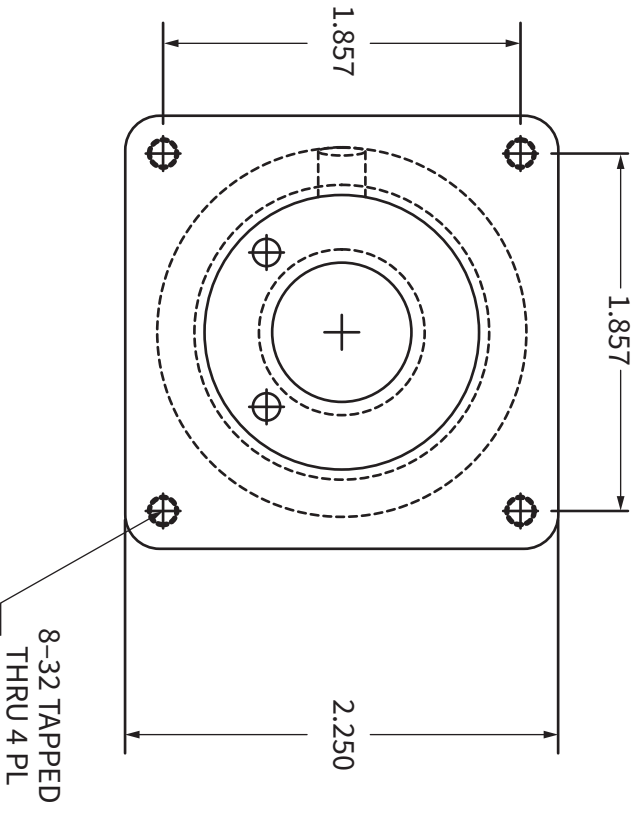
Parts List

NO. REQ.	PART NO.	DESCRIPTION
2	40080	1-5/8" Handwheel, Inch (41040 Metric) (for Stepper Motor, 6565, 6566)
1	40174	Saddle Nut, Plain, Inch (41170 Metric)
1	40175	Manual Saddle Locking Lever, Inch (41175 Metric) (6560, 6561)
1	40330	10-32 x 5/8" Socket Head Cap Screw
2	40520	10-32 x 3/16" Set Screw
2	40600	10-32 x 1/4" Flat Point Set Screw
1	40670	10-32 x 1/2" Socket Head Cap Screw
4	40740	10-32 x 7/8" Socket Head Cap Screws
2	40820	Gib Lock
1	40890	Slide Screw Insert, Inch (41890 Metric)
1	40910	Saddle
1	40980	Gib, Table
1	40990	Gib, Saddle
1	44172	CNC Saddle Locking Lever, Inch (44173 Metric) (6565, 6566)
1	44210	Crossslide Table Leadscrew, Inch (44220 Metric)
1	44880	Crossslide Table
1	45030	Bed
1	65451	Base
2	67018	2" Industrial Handwheel, Inch (670181 Metric) (6560, 6561)
2	67019	Industrial Handwheel Collar (6560, 6561)
1	67030	Leadscrew, Inch (67031 Metric)
8	67100	8-32 x 3/8" Socket Head Cap Screws (6565, 6566)
2	67101	Stepper Motor Mount (6565, 6566)
2	671052	CNC Coupling (6565, 6566)
1	67106	Preload Nut (RH), Inch (67108 Metric)
1	67107	Preload Nut (LH), Inch (67109 Metric)
4	67120	3/8" Flanged Bearing



Shaft: .25" Diameter

If using a non-Sherline stepper motor, make sure to grind flats on the shafts as shown where the coupling and handwheel set screws contact the shaft.



Mounting Instructions

To mount the motor, start by turning the leadscrew until the coupling set screw lines up with the access hole in the mount. Carefully insert the motor shaft into the coupling. With the flanges touching, rotate the stepper motor until the flat on the shaft is in alignment with the coupling set screw. Tighten the set screw. Rotate the motor to align with the motor with the 8-32 tapped holes. We usually attach the motor using three screws and use a zip tie in the fourth hole to secure the wire bundle.

If you decide to use Loc-tite® on the shaft set screw, a problem can occur if the motor has to be removed. What can happen is the shaft ends up glued to the coupling. If this occurs, loosen the preload nut until the motor and shaft can be backed out to expose the coupling so you can work on it. Be careful not to flex the coupling or it can break at the dampening slots.

DO NOT SCALE DRAWING !!!
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES.
TOLERANCES ARE:
DECIMALS .00 ±0.006
DECIMALS .000 ±0.003
ANGLES 1°
DEBURR HAND
HEAT TREAT NONE
FINISH BLACK ANODIZE

SHERLINE SHERLINE PRODUCTS, INC.
STEPPER MOTOR MOUNT

DRAWN	JOE MARTIN	SCALE	1 = 1	SIZE	A	PART NUMBER	67102	REV.	1998-09
CHECKED	JOE MARTIN								
DESIGNER	JOE MARTIN	MATERIAL	3 5/16 ROUND 6061 T6			SHEET	1 of 1		